

EXHIBIT 2

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

ANNE DE LACOUR, ANDREA WRIGHT,
and LOREE MORAN individually and on
behalf of all others similarly situated,

Plaintiffs,

v.

COLGATE-PALMOLIVE CO., and TOM'S
OF MAINE INC.

Defendants.

Expert Report by:

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INTRODUCTION AND QUALIFICATIONS

1. I am a Principal at Applied Marketing Science, Inc. (“AMS”), a market research and consulting firm. I have been at AMS since 2011, and I have worked in the field of market research since 1996. Prior to joining AMS, I held research positions at the Forbes Consulting Group (2003-2011), Lockheed Martin (2002-2003), MCI WorldCom (1999-2002), and Marketing Analysts, Inc. (1996-1999).
2. In my market research career, I have personally designed and conducted hundreds of market research surveys across a broad range of modalities and a broad range of populations.
3. I am a member of the American Association for Public Opinion Research (AAPOR), the Institute for Operations Research and Management Science (INFORMS), and the Insights Association. I currently serve on the Famous and Well-Known Marks Committee of the International Trademark Association (INTA) where I chair the Dilution Subcommittee. In addition, I am the co-host of an annual CLE accredited webinar that focuses on the topic of survey evidence used in intellectual property litigation. I have served as a testifying expert and have submitted reports to Federal and State Courts, as well as the Trademark Trial and Appeal Board, in a variety of litigation matters on behalf of plaintiffs and defendants.
4. I hold a Bachelor of Arts in History from Roanoke College and a Master of Business Administration from the University of Colorado, Colorado Springs. My professional qualifications are described in my curriculum vitae, which is included as Appendix A.

BACKGROUND AND ASSIGNMENT

5. Defendants Colgate-Palmolive Co. and Tom's of Maine Inc. ("Defendants" or "Tom's") are engaged in the business of manufacturing, mass marketing, and distributing Tom's personal care products throughout the United States.¹ It is my understanding that Tom's toothpaste and deodorant packaging and labeling contains representations regarding the "natural" nature of the products.²
6. Plaintiffs Anne de Lacour, Andrea Wright, and Loree Moran ("Plaintiffs") contend that Tom's "natural" representations "are false and misleading because each of the products contains at least one, and in most instances, several, ingredients that are synthetic or chemically processed."³ Plaintiffs allege that these misrepresentations are likely to deceive reasonable consumers "into believing that the Tom's products are natural when, in fact, the products contain ingredients that are not natural."⁴
7. I was asked by counsel for Plaintiffs to design and conduct two consumer surveys to test this allegation. The first survey, which I will refer to as the Toothpaste Survey, tested whether the "natural" representation on the Tom's toothpaste packaging communicates to relevant consumers that the product contains only natural ingredients (i.e., no artificial ingredients). The second survey, which I will refer to as the Deodorant Survey, tested whether the "natural" representation on the Tom's deodorant packaging communicates to relevant consumers that the product contains only natural ingredients (i.e., no artificial ingredients).

¹ First Amended Class Action Complaint, ¶ 9.

² Id, ¶¶ 15, 17.

³ Id, ¶ 23.

⁴ Id, ¶ 103.

8. In undertaking this assignment, I relied on generally accepted principles of market research, as well as my extensive expertise in survey development and the interpretation of qualitative and quantitative data. The work I performed for this investigation was as an employee of AMS, and other AMS employees worked on this assignment under my direction. My rate of compensation for this assignment is \$600 per hour. My compensation is not contingent upon the outcome of this case.
9. A complete list of materials I have considered to date in connection with this assignment is included in Appendix B. I reserve the right to update and revise my opinions and conclusions should any additional data or information become available to me.

SUMMARY OF OPINIONS

10. My independent research in this matter has led me to conclude the following:
 - a. A substantial proportion of relevant consumers who viewed the Tom's toothpaste packaging took away a mistaken belief that the product contains only natural ingredients (i.e., no artificial ingredients). Specifically, 59.8% of Test Group respondents indicated they believed that the product contains only natural ingredients (i.e., no artificial ingredients). After accounting for guessing and other forms of survey noise, the net level of deception is 26.3%. It is my understanding that this result is above the threshold courts have found to support a finding of deception.⁵

⁵ McCarthy on Trademarks and Unfair Competition § 32:193 (5th ed.). "Since the issue of likely customer deception from an allegedly false advertisement is closely analogous to the issue of likely confusion from an allegedly infringing mark, it is proper to use the percentage figures accepted in likelihood of confusion surveys."; McCarthy on Trademarks and Unfair Competition § 32:188 (5th ed.). "the Second Circuit found that a 15-20% rate corroborates a finding of likely confusion."

- b. A substantial proportion of relevant consumers who viewed the Tom's deodorant packaging took away a mistaken belief that the product contains only natural ingredients (i.e., no artificial ingredients). Specifically, 62.5% of Test Group respondents indicated they believed that the product contains only natural ingredients (i.e., no artificial ingredients). After accounting for guessing and other forms of survey noise, the net level of deception is 24.0%. It is my understanding that this result is above the threshold courts have found to support a finding of deception.⁶

SURVEY METHODOLOGY

11. The two surveys were designed and conducted in accordance with generally accepted principles of survey research, as set forth in the Federal Judicial Center's Manual for Complex Litigation "Reference Guide on Survey Research."⁷
12. To ensure objectivity in survey responses, it is standard practice to conduct surveys in a "double-blind" manner (i.e., withhold information about the purpose and sponsor of the survey from both the interviewer and the respondent).⁸ The two surveys that I designed for this assignment satisfied these conditions. Specifically, the surveys were administered via programmed Internet questionnaire, eliminating the need for a human interviewer. The main questionnaires did not provide any information about the actual purpose of the survey or the survey sponsor. In addition, the screening questions included categories of

⁶ Id.

⁷ Diamond, Shari S. (2011). Reference Guide on Survey Research. In Federal Judicial Center and The National Academies Press, *Reference Manual on Scientific Evidence* (359-423).

⁸ Id., pp. 410-411.

goods and services unrelated to the survey's purpose to disguise the "correct" answer for sample selection.

13. It is standard survey practice to instruct respondents not to guess. Accordingly, the instructions at the beginning of each survey state, "If you don't know an answer to a question or are unsure, please indicate this by selecting the "Don't know/Unsure" option. It is very important that you do not guess." In addition, the surveys included explicit "Don't know/Unsure" and "No opinion" response options. The inclusion of these response options substantially reduces the likelihood that respondents will attempt to guess the answer to a question if they are unsure or do not have an opinion.⁹
14. When designing closed-ended questions, it is good practice to rotate or randomize the order of the response options to control for possible order effects. The surveys that I conducted rotated or randomized the order of response options to the closed-ended questions for this reason. I deviated from this practice where appropriate to preserve the logical flow of the questions. Specifically, I did not rotate or randomize the response options for questions where the answer choices have a predetermined order (e.g., age). In addition, the "None of the above," "Don't know/Unsure" and "No opinion" answer choices were anchored as the last answer choices.
15. As is standard practice in survey research, respondents' answers to open-ended questions were coded and analyzed. I directly supervised a team of coders who coded the open-ended responses, and I resolved any discrepancies through discussions. I personally reviewed and validated all final codes.

⁹ Id., p. 390.

TOOTHPASTE SURVEY UNIVERSE AND SAMPLE SELECTION

16. To reach a representative sample of the appropriate population, I developed an Internet survey that included U.S. adults aged 18 and older who reside in California, Florida, or New York. In the Toothpaste Survey, respondents had to indicate that they planned to personally purchase natural toothpaste in the next six months.
17. Internet surveys are an accepted form of market research.¹⁰ In addition, there is evidence that data collected using Internet surveys does not differ in quality from that collected using phone or mall-intercept methodologies.¹¹ The surveys were conducted by contracting with a panel company that has pre-recruited potential respondents who have indicated their willingness to participate in consumer surveys. For the present matter, I contracted with Prodege Market Research (“Prodege”), a well-established market research firm that maintains a panel of about 5.7 million active members in the U.S.¹² I have worked with Prodege on many other projects and have found them to be a consistently reliable and high-quality supplier of qualified survey respondents.
18. For this survey, invitations were sent to panel members ages 18 and older. Click-balancing was implemented to ensure that the individuals who had the opportunity to qualify for the survey approximate the U.S. Census in terms of age and gender for the states of California, Florida, and New York. “Click-balancing” refers to the process of ensuring that the group of people who click on the survey link (not to be confused with the group of people who qualify and complete the survey) is representative of the

¹⁰ Poret, H. (2010). A comparative empirical analysis of online versus mall and phone methodologies for trademark surveys, *The Trademark Reporter*, 100(3), 756-807.

¹¹ Id.

¹² Active members are defined as having responded to a survey invitation in the past 12 months.

population of California, Florida, and New York.¹³ Because respondents who enter the survey screener are representative of these states, their individual responses to qualification screening questions means that the final survey sample is representative of the target population on the screened dimensions.¹⁴

19. The email invitation sent to Prodege panel members included a link to the actual survey. This link contained an embedded identification number that assured that each respondent could only complete the survey once. Additionally, respondents invited to the Toothpaste Survey were not invited or allowed to participate in the Deodorant Survey. As is customary for consumer surveys for litigation, as well as other market research surveys, respondents who qualified and completed the survey received a small monetary incentive. Respondents who qualified and completed their survey were awarded 50 “Swagbucks,” a form of Prodege currency. Copies of the invitation are included as Appendix C.

TOOTHPASTE SURVEY

20. To determine whether the “natural” representation on the Tom’s toothpaste packaging communicates to relevant consumers that the product contains only natural ingredients (i.e., no artificial ingredients), I used a test-control experimental design. The purpose of a test-control experimental design is to isolate the influence of the “natural” representation on the toothpaste packaging to determine whether this claim communicates to relevant consumers that the product contains only natural ingredients (i.e., no artificial

¹³ The process of click-balancing involves sending periodic updates to the panel vendor on the age, gender, and, in this case, state breakdown of inbound clicks on the survey link so that the panel vendor can make any necessary adjustments to their survey invitation mailings (i.e., which age/gender/state groups they send invitations to and in what quantity).

¹⁴ Jacoby, J. (2013). Trademark Surveys Volume 1, Designing, Implementing, and Evaluating Surveys. US: American Bar Association, pp.384-385.

ingredients) when, as I understand it, the product contains ingredients that are synthetic or chemically processed.¹⁵ This design is used to account for the level of respondent guessing and other forms of survey noise. Survey noise refers to factors that introduce error or bias into the survey estimates, causing them to deviate from the “true” level of deception.

21. The use of a test-control design is analogous to the use of a placebo in the test of, for example, a new drug. To test a new drug, some patients are given the test drug, and some are given a placebo (such as a sugar pill) or some other drug with a known efficacy. Patients are randomly assigned to receive either the test drug or the control. The effect of the drug is measured by the difference in response between those receiving the test drug (the “Test” group) and those receiving the placebo (the “Control” group). The use of a control in the drug testing situation is important because some people will get well even with no treatment at all, and some get well just because they think their disease is being treated. The critical measure in a test-control design, such as the one used here, is the difference in responses between the Test and Control Groups, known as the “net” effect.
22. In creating the control stimulus, I followed generally accepted principles of survey research; that is, the control stimulus was identical to the test stimulus except that the “natural” claim was replaced with “CONTAINS SOME NATURAL INGREDIENTS*” and a disclosure was added to inform respondents that the product contains one or more artificial ingredients. Thus, the only difference between the Test Group and the Control Group was the replacement of the “natural” claim with “CONTAINS SOME NATURAL INGREDIENTS*” and the disclosure that the product contains one or more artificial

¹⁵ First Amended Class Action Complaint, ¶ 23.

ingredients. Because nothing else differed between the two stimuli, any difference about whether the “natural” claim communicates that the product contains only natural ingredients (i.e., no artificial ingredients) can only be attributed to the “CONTAINS SOME NATURAL INGREDIENTS*” statement and the disclosure that the product contains one or more artificial ingredients.

23. Respondents in the Test Group saw the Tom’s toothpaste packaging (see Exhibit 1) and were asked to review it as they normally would if they were shopping for toothpaste. Respondents in the Control Group saw the same packaging, but with the modifications discussed previously (see Exhibit 2).

Exhibit 1: Test Stimulus (Front only)¹⁶



¹⁶ These images have been reduced in size in order to fit into this report. In the actual survey, these images appeared large and legible across respondents’ screens. Additionally, respondents were able to view 4 sides of the packaging and zoom in to see a larger image if they chose to do so. Screenshots of how the survey appeared to respondents are included in Appendix D of this report. The images used to program the survey are provided in Appendix I.

Exhibit 2: Control Stimulus (Front only)

24. The survey began with a series of screening questions to determine if the respondent was a member of the relevant population and qualified to participate in the survey.

Screenshots taken from the survey and a text version of the survey with programmer instructions are included as Appendix D.¹⁷

Toothpaste Survey Screener

25. The first screening question (QS0) asked respondents to enter the code shown on the screen exactly as it is shown in a CAPTCHA box. This is a standard question to ensure that only actual people, as opposed to computer programs, take the survey. Next (QS1), respondents indicated what type of electronic device they were using to complete the survey. Respondents were only allowed to continue if they selected “Desktop computer,”

¹⁷ Before survey administration, I conducted pretesting to ensure that the questions and stimuli were functioning properly and were understood by respondents.

“Laptop computer,” or “Tablet computer.” This was to ensure that respondents took the survey on a device with a screen large enough for them to easily view the toothpaste packaging and provide a response. Respondents who indicated that they were using a smartphone or other mobile or electronic device received an instruction that the survey was not formatted for viewing on such devices and were prompted to log back into the survey using the same link from a desktop, laptop, or tablet computer. The gender of the respondent was collected in QS2. Next, respondents were asked to select which category their age falls (QS3). Anyone who selected “Under 18” was not permitted to continue. Respondents were then asked to indicate their state of residence (QS4). Only respondents who indicated that they currently reside in California, Florida, or New York were allowed to continue. Next, the gender of the respondent was then used in combination with the age information to validate that the person taking the survey was the same person who had originally enrolled with the panel provider. Respondents were then asked to indicate if they or any member of their household work for certain types of companies (QS5). Anyone who selected “A company that manufactures or sells toothpaste” or “A market research or advertising agency” was not permitted to continue.

26. Next, respondents were asked:

QS6. Which, if any, of the following products are you likely to personally purchase in the **next 6 months**? (*Select all that apply*)

- ☐ Natural toothpaste
- ☐ Liquid laundry detergent
- ☐ Sparkling bottled water
- ☐ Bran cereal
- ☐ Low-fat ice cream
- ☐ Wireless hextall
- ☐ None of the above
- ☐ Don't know/Unsure

27. The response options to QS6 were presented in a random order to avoid potential response bias, with the exception of “None of the above” and “Don’t know/Unsure,” which were always presented last. Respondents were required to indicate that they were likely to personally purchase natural toothpaste in the next 6 months to continue. For quality control purposes, respondents who indicated that they were likely to purchase the fictional “Wireless hexall” product were terminated from the survey.
28. As an additional quality control measure, the final screening question, QS7, asked respondents to select the “Other” option from the response options listed and type one of four words (“quality,” “check,” “survey,” or “question”) into the space provided. The word that was shown to respondents was randomly selected from the list of four possible options and piped into the question text. Respondents who either did not select the “Other” option or did not type the correct word into the space provided were terminated from the study.
29. At this point, qualified respondents were asked to ensure their device had image viewing capabilities, to take the survey in one session, to keep their browser maximized for the entire survey, to take the survey on their own without consulting other websites, electronic or written materials, or other people, and to wear eyeglasses or contact lenses if normally needed for viewing an electronic screen (QS8). Respondents who understood and agreed to these instructions continued to the main questionnaire.

Toothpaste Survey Main Questionnaire

30. The main part of the questionnaire began by providing respondents with the introduction below:

In the next section of the survey, you will be shown images of toothpaste packaging that you might encounter while shopping. Take as much time as you would like to look at the images. Afterward, you will be asked some questions about what you have seen.

If, for any question, you don't know the answer or are unsure, please choose the "Don't know/Unsure" option. It is very important that you do not guess.

Please select the "NEXT" button when you are ready to continue.

31. After clicking the "NEXT" button, respondents were randomly assigned to either the Test Group or the Control Group and shown Tom's toothpaste packaging. Test Group respondents viewed the package with the "natural" claim and Control Group respondents viewed the same package, with the exception of the modifications described previously. The following instruction appeared above the Tom's toothpaste packaging:

Please look at the images displayed below as you normally would if you were shopping for toothpaste. When you are finished, please scroll to the bottom of the page and select the "NEXT" button to continue.

32. Respondents were presented with 4 images of the Toms' toothpaste packaging (front, back, left side of box, right side of box) and were told that they could zoom in on any of the images by hovering their mouse over the image on a desktop or laptop computer or by double tapping the image on a tablet. Respondents were also told they could click the thumbnail images to switch among views of the product. Before respondents could proceed to the next page, they were required to spend at least 5 seconds reviewing the Tom's toothpaste packaging.
33. The Tom's toothpaste packaging images described above were removed from view for the remainder of the survey.

34. In the first survey question (Q0), respondents were asked to indicate if they were able to view the Tom's toothpaste images clearly. Those who were unable to view the images clearly were not permitted to continue. Respondents who were able to view the images clearly continued to the next survey question.

35. Next, respondents were asked open-ended questions Q1 and Q2. Q1 asked respondents "What was the main message communicated to you by the product packaging?" Respondents could enter a response in the text box or select "Don't know/Unsure." Those who selected "Don't know/Unsure" skipped to Q3. Q2 asked respondents, "What other messages, if any, were communicated to you by the product packaging?" Respondents could again type an answer in the text box or select "No other messages."

36. Respondents were then asked closed-ended question Q3:

Q3. Did the product packaging communicate anything about whether or not the toothpaste is natural? (*Select one only*)

- ☐ The product packaging did communicate something about whether or not the toothpaste is natural
- ☐ The product packaging did not communicate anything about whether or not the toothpaste is natural
- ☐ Don't know/Unsure

37. The first two response options were rotated to avoid any potential response bias. Respondents who indicated either that the product packaging did not communicate anything about whether or not the toothpaste is natural or that they did not know or were unsure skipped to the end of the survey. Respondents who selected that the product packaging did communicate something about whether or not the toothpaste is natural continued to the next question.

38. Next, Q4 asked respondents, "What did the product packaging communicate about whether or not the toothpaste is natural?" Respondents could enter a response in the text box or select "Don't know/Unsure."

39. Next, respondents were asked closed-ended question Q5:

Q5. Based on the product packaging, do you believe the toothpaste shown...?
(*Select one only*)

- ☐ Contains only natural ingredients (i.e., no artificial ingredients)
- ☐ Contains some natural ingredients and some artificial ingredients
- ☐ Contains no natural ingredients (i.e., only artificial ingredients)
- ☐ No opinion
- ☐ Don't know/Unsure

40. The first three response options were rotated top to bottom to avoid any potential response bias. After respondents completed Q5, they had completed the survey and were thanked for their time.

TOOTHPASTE SURVEY DATA COLLECTION

41. A total of 1,716 potential respondents responded to the email invitation between July 13, 2022 and July 15, 2022. A total of 441 respondents qualified for the survey based on their responses to the screening questions; these respondents completed the survey. Data from 26 respondents who provided nonsensical answers to open-ended questions, streamlined survey responses, or who took over an hour to complete the survey were removed from the data set prior to analysis. The final dataset included 415 respondents (209 in the Test Group and 206 in the Control Group). This is a statistically valid sample size that provides an appropriate number of qualifying respondents for purposes of my analysis and opinion.¹⁸ Detailed response statistics are shown in Appendix E.

TOOTHPASTE SURVEY RESULTS

42. In Q1 and Q2, respondents were asked open-ended questions about what they believed were the main messages communicated by the toothpaste product packaging. The results

¹⁸ Jacoby, J. (2013). Trademark Surveys Volume 1, Designing, Implementing, and Evaluating Surveys. US: American Bar Association, pp.439-444.

in Table 1 show that 68.4% of Test Group respondents and 72.8% of Control Group respondents indicated that the packaging communicated something about the natural representation.

Table 1: Q1/Q2.

What was the main message communicated to you by the product packaging? / What other messages, if any, were communicated to you by the product packaging?

	Test Group		Control Group	
	N	%	N	%
Mentioned something about the “natural” representation	143	68.4%	150	72.8%
No mention of the “natural” representation	66	31.6%	56	27.2%
Total	209	100.0%	206	100.0%

43. In Q3, respondents were asked if the product packaging communicated anything about whether or not the toothpaste is natural. The results in Table 2 show that 92.3% of Test Group respondents indicated that the product packaging did communicate something about whether or not the toothpaste is natural, compared to 92.7% of Control Group respondents.

Table 2: Q3.

Did the product packaging communicate anything about whether or not the toothpaste is natural?

	Test Group		Control Group	
	N	%	N	%
The product packaging <u>did</u> communicate something about whether or not the toothpaste is natural	193	92.3%	191	92.7%
The product packaging <u>did not</u> communicate anything about whether or not the toothpaste is natural	7	3.3%	2	1.0%
Don’t know/Unsure	9	4.3%	13	6.3%
Total	209	100.0%*	206	100.0%

*percentages do not sum to 100.0% due to rounding

44. Respondents who indicated in Q3 that the product packaging did communicate something about whether or not the toothpaste is natural were asked Q5. Responses to Q5 were analyzed to determine whether the “natural” representation on the Tom’s toothpaste packaging communicates to relevant consumers that the product contains only natural ingredients (i.e., no artificial ingredients).
45. Plaintiffs allege that the “natural” representation is misleading because the product contains ingredients that are synthetic or chemically processed. Therefore, survey respondents who indicated in Q5 that, based on the product packaging, they believe the toothpaste product “contains only natural ingredients (i.e., no artificial ingredients)” are counted as deceived.
46. The results in Table 3 show that 59.8% of Test Group respondents indicated that, based on the product packaging, they believe the toothpaste shown contains only natural ingredients (i.e., no artificial ingredients) compared to the 33.5% in the Control Group, for a net deception level of 26.3%. It is my understanding that this result is above the threshold courts have found to support a finding of deception.¹⁹

¹⁹ McCarthy on Trademarks and Unfair Competition § 32:193 (5th ed.). “Since the issue of likely customer deception from an allegedly false advertisement is closely analogous to the issue of likely confusion from an allegedly infringing mark, it is proper to use the percentage figures accepted in likelihood of confusion surveys.”; McCarthy on Trademarks and Unfair Competition § 32:188 (5th ed.). “the Second Circuit found that a 15-20% rate corroborates a finding of likely confusion.”

Table 3: Q5.

Based on the product packaging, do you believe the toothpaste shown...?

	Test Group		Control Group		Net Deception
	N	%	N	%	%
Contains <u>only</u> natural ingredients (i.e., no artificial ingredients)	125	59.8%	69	33.5%	26.3%
Contains <u>some</u> natural ingredients and <u>some</u> artificial ingredients	26	12.4%	97	47.1%	
Contains <u>no</u> natural ingredients (i.e., only artificial ingredients)	6	2.9%	3	1.5%	
No opinion	4	1.9%	1	0.5%	
Don't know/Unsure	7	3.3%	7	3.4%	
Not included in analysis ²⁰	41	19.6%	29	14.1%	
Total	209	100.0%*	206	100.0%*	

*percentages do not sum to 100.0% due to rounding

47. It is important to note that these results do not mean that the majority of respondents did not take away a mistaken belief that the toothpaste shown contains only natural ingredients (i.e., no artificial ingredients). Indeed, only 12.4% of respondents in the Test Group took away a belief from the packaging that the product contains some natural ingredients and some artificial ingredients.

DEODORANT SURVEY UNIVERSE AND SAMPLE SELECTION

48. To reach a representative sample of the appropriate population, I developed an Internet survey that included U.S. adults aged 18 and older who reside in California, Florida, or

²⁰ 41 respondents in the Test Group and 29 respondents in the Control Group were not included in the Q5 analysis because they either a) indicated in Q3 that the product packaging did not communicate anything to them about whether or not the toothpaste is natural and skipped to the end of the survey or b) indicated in Q4 that they did not know or were unsure what the packaging communicated about whether or not the toothpaste is natural (either by checking the “Don’t know/Unsure” checkbox or by typing in a similar response in the text box).

New York. In the Deodorant Survey, respondents had to indicate that they personally planned to purchase natural deodorant in the next six months.

49. Internet surveys are an accepted form of market research.²¹ In addition, there is evidence that data collected using Internet surveys does not differ in quality from that collected using phone or mall-intercept methodologies.²² The surveys were conducted by contracting with a panel company that has pre-recruited potential respondents who have indicated their willingness to participate in consumer surveys. For the present matter, I contracted with Prodege Market Research (“Prodege”), a well-established market research firm that maintains a panel of about 5.7 million active members in the U.S.²³ I have worked with Prodege on many other projects and have found them to be a consistently reliable and high-quality supplier of qualified survey respondents.
50. For this survey, invitations were sent to panel members ages 18 and older. Click-balancing was implemented to ensure that the individuals who had the opportunity to qualify for the survey approximate the U.S. Census in terms of age and gender for the states of California, Florida, and New York. “Click-balancing” refers to the process of ensuring that the group of people who click on the survey link (not to be confused with the group of people who qualify and complete the survey) is representative of the population of California, Florida, and New York.²⁴ Because respondents who enter the survey screener are representative of these states, their individual responses to

²¹ Poret, H. (2010). A comparative empirical analysis of online versus mall and phone methodologies for trademark surveys, *The Trademark Reporter*, 100(3), 756-807.

²² *Id.*

²³ Active members are defined as having responded to a survey invitation in the past 12 months.

²⁴ The process of click-balancing involves sending periodic updates to the panel vendor on the age, gender, and, in this case, state breakdown of inbound clicks on the survey link so that the panel vendor can make any necessary adjustments to their survey invitation mailings (i.e., which age/gender/state groups they send invitations to and in what quantity).

qualification screening questions means that the final survey sample is representative of the target population on the screened dimensions.²⁵

51. The email invitation sent to Prodege panel members included a link to the actual survey. This link contained an embedded identification number that assured that each respondent could only complete the survey once. Additionally, respondents invited to the Deodorant Survey were not invited or allowed to participate in the Toothpaste Survey. As is customary for consumer surveys for litigation, as well as other market research surveys, respondents who qualified and completed the survey received a small monetary incentive. Respondents who qualified and completed their survey were awarded 50 “Swagbucks,” a form of Prodege currency. Copies of the invitation are included as Appendix C.

DEODORANT SURVEY

52. To determine whether the “natural” representation on the Tom’s deodorant packaging communicates to relevant consumers that the product contains only natural ingredients (i.e., no artificial ingredients), I used a test-control experimental design. The purpose of a test-control experimental design is to isolate the influence of the “natural” representation on the deodorant packaging to determine whether this claim communicates to relevant consumers that the product contains only natural ingredients (i.e., no artificial ingredients) when, as I understand it, the product contains ingredients that are synthetic or chemically processed.²⁶ This design is used to account for the level of respondent guessing and other forms of survey noise. Survey noise refers to factors that introduce

²⁵ Jacoby, J. (2013). Trademark Surveys Volume 1, Designing, Implementing, and Evaluating Surveys. US: American Bar Association, pp.384-385.

²⁶ First Amended Class Action Complaint, ¶ 23.

error or bias into the survey estimates, causing them to deviate from the “true” level of deception.

53. The use of a test-control design is analogous to the use of a placebo in the test of, for example, a new drug. To test a new drug, some patients are given the test drug, and some are given a placebo (such as a sugar pill) or some other drug with a known efficacy. Patients are randomly assigned to receive either the test drug or the control. The effect of the drug is measured by the difference in response between those receiving the test drug (the “Test” group) and those receiving the placebo (the “Control” group). The use of a control in the drug testing situation is important because some people will get well even with no treatment at all, and some get well just because they think their disease is being treated. The critical measure in a test-control design, such as the one used here, is the difference in responses between the Test and Control Groups, known as the “net” effect.
54. In creating the control stimulus, I followed generally accepted principles of survey research; that is, the control stimulus was identical to the test stimulus except that the “natural” claim was replaced with “CONTAINS SOME NATURAL INGREDIENTS*” and a disclosure was added to inform respondents that the product contains one or more artificial ingredients. Thus, the only difference between the Test Group and the Control Group was the replacement of the “natural” claim with “CONTAINS SOME NATURAL INGREDIENTS*” and the disclosure that the product contains one or more artificial ingredients. Because nothing else differed between the two stimuli, any difference about whether the “natural” claim communicates that the product contains only natural ingredients (i.e., no artificial ingredients) can only be attributed to the “CONTAINS

SOME NATURAL INGREDIENTS*” statement and the disclosure that the product contains one or more artificial ingredients.

55. Respondents in the Test Group saw the Tom’s deodorant packaging (see Exhibit 3) and were asked to review it as they normally would if they were shopping for deodorant. Respondents in the Control Group saw the same packaging, but with the modifications discussed previously (see Exhibit 4).

Exhibit 3: Test Stimulus (Front only)²⁷



²⁷ These images have been reduced in size in order to fit into this report. In the actual survey, these images appeared large and legible across respondents’ screens. Additionally, respondents were able to view both sides of the packaging and zoom in to see a larger image if they chose to do so. Screenshots of how the survey appeared to respondents are included in Appendix D of this report. The images used to program the survey are provided in Appendix I.

Exhibit 4: Control Stimulus (Front only)

56. The survey began with a series of screening questions to determine if the respondent was a member of the relevant population and qualified to participate in the survey.

Screenshots taken from the survey and a text version of the survey with programmer instructions are included as Appendix D.²⁸

Deodorant Survey Screener

57. The first screening question (QS0) asked respondents to enter the code shown on the screen exactly as it is shown in a CAPTCHA box. This is a standard question to ensure that only actual people, as opposed to computer programs, take the survey. Next (QS1), respondents indicated what type of electronic device they were using to complete the survey. Respondents were only allowed to continue if they selected “Desktop computer,” “Laptop computer,” or “Tablet computer.” This was to ensure that respondents took the

²⁸ Before survey administration, I conducted pretesting to ensure that the questions and stimuli were functioning properly and were understood by respondents.

survey on a device with a screen large enough for them to easily view the deodorant packaging and provide a response. Respondents who indicated that they were using a smartphone or other mobile or electronic device received an instruction that the survey was not formatted for viewing on such devices and were prompted to log back into the survey using the same link from a desktop, laptop, or tablet computer. The gender of the respondent was collected in QS2. Next, respondents were asked to select which category their age falls (QS3). Anyone who selected “Under 18” was not permitted to continue. Respondents were then asked to indicate their state of residence (QS4). Only respondents who indicated that they currently reside in California, Florida, or New York were allowed to continue. Next, the gender of the respondent was then used in combination with the age information to validate that the person taking the survey was the same person who had originally enrolled with the panel provider. Respondents were then asked to indicate if they or any member of their household work for certain types of companies (QS5). Anyone who selected “A company that manufactures or sells deodorant” or “A market research or advertising agency” was not permitted to continue.

58. Next, respondents were asked:

QS6. Which, if any, of the following products are you likely to personally purchase in the **next 6 months**? (*Select all that apply*)

- ☐ Natural deodorant
- ☐ Liquid laundry detergent
- ☐ Sparkling bottled water
- ☐ Bran cereal
- ☐ Low-fat ice cream
- ☐ Wireless headset
- ☐ None of the above
- ☐ Don't know/Unsure

59. The response options to QS6 were presented in a random order to avoid potential response bias, with the exception of “None of the above” and “Don’t know/Unsure,” which were always presented last. Respondents were required to indicate that they were likely to personally purchase natural deodorant in the next 6 months to continue. For quality control purposes, respondents who indicated that they were likely to purchase the fictional “Wireless hexall” product were terminated from the survey.
60. As an additional quality control measure, the final screening question, QS7, asked respondents to select the “Other” option from the response options listed and type one of four words (“quality,” “check,” “survey,” or “question”) into the space provided. The word that was shown to respondents was randomly selected from the list of four possible options and piped into the question text. Respondents who either did not select the “Other” option or did not type the correct word into the space provided were terminated from the study.
61. At this point, qualified respondents were asked to ensure their device had image viewing capabilities, to take the survey in one session, to keep their browser maximized for the entire survey, to take the survey on their own without consulting other websites, electronic or written materials, or other people, and to wear eyeglasses or contact lenses if normally needed for viewing an electronic screen (QS8). Respondents who understood and agreed to these instructions continued to the main questionnaire.

Deodorant Survey Main Questionnaire

62. The main part of the questionnaire began by providing respondents with the introduction below:

In the next section of the survey, you will be shown images of deodorant packaging that you might encounter while shopping. Take as much time as you would like to look at the images. Afterward, you will be asked some questions about what you have seen.

If, for any question, you don't know the answer or are unsure, please choose the "Don't know/Unsure" option. It is very important that you do not guess.

Please select the "NEXT" button when you are ready to continue.

63. After clicking the "NEXT" button, respondents were randomly assigned to either the Test Group or the Control Group and shown Tom's deodorant packaging. Test Group respondents viewed the package with the "natural" claim and Control Group respondents viewed the same package, with the exception of the modifications described previously. The following instruction appeared above the Tom's deodorant packaging:

Please look at the images displayed below as you normally would if you were shopping for deodorant. When you are finished, please scroll to the bottom of the page and select the "NEXT" button to continue.

64. Respondents were presented with 2 images of the Toms' deodorant packaging (front and back) and were told that they could zoom in on any of the images by hovering their mouse over the image on a desktop or laptop computer or by double tapping the image on a tablet. Respondents were also told they could click the thumbnail images to switch among views of the product. Before respondents could proceed to the next page, they were required to spend at least 5 seconds reviewing the Tom's deodorant packaging.
65. The Tom's deodorant packaging images described above were removed from view for the remainder of the survey.
66. In the first survey question (Q0), respondents were asked to indicate if they were able to view the Tom's deodorant images clearly. Those who were unable to view the images

clearly were not permitted to continue. Respondents who were able to view the images clearly continued to the next survey question.

67. Next, respondents were asked open-ended questions Q1 and Q2. Q1 asked respondents “What was the main message communicated to you by the product packaging?”

Respondents could enter a response in the text box or select “Don’t know/Unsure.” Those who selected “Don’t know/Unsure” skipped to Q3. Q2 asked respondents, “What other messages, if any, were communicated to you by the product packaging?” Respondents could again type an answer in the text box or select “No other messages.”

68. Respondents were then asked closed-ended question Q3:

Q3. Did the product packaging communicate anything about whether or not the deodorant is natural? (*Select one only*)

- ☐ The product packaging did communicate something about whether or not the deodorant is natural
- ☐ The product packaging did not communicate anything about whether or not the deodorant is natural
- ☐ Don’t know/Unsure

69. The first two response options were rotated to avoid any potential response bias.

Respondents who indicated either that the product packaging did not communicate anything about whether or not the deodorant is natural or that they did not know or were unsure skipped to the end of the survey. Respondents who selected that the product packaging did communicate something about whether or not the deodorant is natural continued to the next question.

70. Q4 asked respondents, “What did the product packaging communicate about whether or not the deodorant is natural?” Respondents could enter a response in the text box or select “Don’t know/Unsure.”

71. Next, respondents were asked closed-ended question Q5:

Q5. Based on the product packaging, do you believe the deodorant shown...?
(Select one only)

- ☐ Contains only natural ingredients (i.e., no artificial ingredients)
- ☐ Contains some natural ingredients and some artificial ingredients
- ☐ Contains no natural ingredients (i.e., only artificial ingredients)
- ☐ No opinion
- ☐ Don't know/Unsure

72. The first three response options were rotated top to bottom to avoid any potential response bias. After respondents completed Q5, they had completed the survey and were thanked for their time.

DEODORANT SURVEY DATA COLLECTION

73. A total of 1,453 potential respondents responded to the email invitation between July 13, 2022 and July 18, 2022. A total of 426 respondents qualified for the survey based on their responses to the screening questions; these respondents completed the survey. Data from 18 respondents who provided nonsensical answers to open-ended questions, streamlined survey responses, or who took over an hour to complete the survey were removed from the data set prior to analysis. The final dataset included 408 respondents (200 in the Test Group and 208 in the Control Group). This is a statistically valid sample size that provide an appropriate number of qualifying respondents for purposes of my analysis and opinion.²⁹ Detailed response statistics are shown in Appendix E.

DEODORANT SURVEY RESULTS

74. In Q1 and Q2, respondents were asked open-ended questions about what they believed were the main messages communicated by the deodorant product packaging. The results

²⁹ Jacoby, J. (2013). Trademark Surveys Volume 1, Designing, Implementing, and Evaluating Surveys. US: American Bar Association, pp.439-444.

in Table 4 show that 76.0% of Test Group respondents and 76.9% of Control Group respondents mentioned something about the natural representation on the packaging.

Table 4: Q1/Q2.

What was the main message communicated to you by the product packaging? / What other messages, if any, were communicated to you by the product packaging?

	Test Group		Control Group	
	N	%	N	%
Mentioned something about the “natural” representation	152	76.0%	160	76.9%
No mention of the “natural” representation	48	24.0%	48	23.1%
Total	200	100.0%	208	100.0%

75. In Q3, respondents were asked if the product packaging communicated anything about whether or not the deodorant is natural. The results in Table 5 show that 90.5% of Test Group respondents indicated that the product packaging did communicate something about whether or not the deodorant is natural, compared to 92.8% of Control Group respondents.

Table 5: Q3.

Did the product packaging communicate anything about whether or not the deodorant is natural?

	Test Group		Control Group	
	N	%	N	%
The product packaging <u>did</u> communicate something about whether or not the deodorant is natural	181	90.5%	193	92.8%
The product packaging <u>did not</u> communicate anything about whether or not the deodorant is natural	10	5.0%	6	2.9%
Don’t know/Unsure	9	4.5%	9	4.3%
Total	200	100.0%	208	100.0%

76. Respondents who indicated in Q3 that the product packaging did communicate something about whether or not the deodorant is natural were asked Q5. Responses to Q5 were analyzed to determine whether the “natural” representation on the Tom’s deodorant packaging communicates to relevant consumers that the product contains only natural ingredients (i.e., no artificial ingredients).
77. Plaintiffs allege that the “natural” representation is misleading because the product contains ingredients that are synthetic or chemically processed. Therefore, survey respondents who indicated in Q5 that, based on the product packaging, they believe the deodorant product “contains only natural ingredients (i.e., no artificial ingredients)” are counted as deceived.
78. The results in Table 6 show that 62.5% of Test Group respondents indicated that, based on the product packaging, they believe the deodorant shown contains only natural ingredients (i.e., no artificial ingredients) compared to the 38.5% in the Control Group, for a net deception level of 24.0%. It is my understanding that this result is above the threshold courts have found to support a finding of deception.³⁰

³⁰ McCarthy on Trademarks and Unfair Competition § 32:193 (5th ed.). “Since the issue of likely customer deception from an allegedly false advertisement is closely analogous to the issue of likely confusion from an allegedly infringing mark, it is proper to use the percentage figures accepted in likelihood of confusion surveys.”; McCarthy on Trademarks and Unfair Competition § 32:188 (5th ed.). “the Second Circuit found that a 15-20% rate corroborates a finding of likely confusion.”

Table 6: Q5.

Based on the product packaging, do you believe the deodorant shown...?

	Test Group		Control Group		Net Deception
	N	%	N	%	%
Contains <u>only</u> natural ingredients (i.e., no artificial ingredients)	125	62.5%	80	38.5%	24.0%
Contains <u>some</u> natural ingredients and <u>some</u> artificial ingredients	30	15.0%	95	45.7%	
Contains <u>no</u> natural ingredients (i.e., only artificial ingredients)	3	1.5%	0	0.0%	
No opinion	3	1.5%	0	0.0%	
Don't know/Unsure	10	5.0%	5	2.4%	
Not included in analysis ³¹	29	14.5%	28	13.5%	
Total	200	100.0%	208	100.0%*	

*percentages do not sum to 100.0% due to rounding

79. It is important to note that these results do not mean that the majority of respondents did not take away a mistaken belief that the deodorant shown contains only natural ingredients (i.e., no artificial ingredients). Indeed, only 15.0% of respondents in the Test Group took away a belief from the packaging that the product contains some natural ingredients and some artificial ingredients.

CONCLUSIONS

80. Based on the results of the surveys that I designed and conducted, it is my opinion that the “natural” claim on Tom’s toothpaste and deodorant product packaging is likely to

³¹ 29 respondents in the Test Group and 28 respondents in the Control Group were not included in the Q5 analysis because they either a) indicated in Q3 that the product packaging did not communicate anything to them about whether or not the toothpaste is natural and skipped to the end of the survey or b) indicated in Q4 that they did not know or were unsure what the packaging communicated about whether or not the deodorant is natural (either by checking the “Don’t know/Unsure” checkbox or by typing in a similar response in the text box).

deceive reasonable consumers into believing that the products contain only natural ingredients (i.e., no artificial ingredients).

81. Specifically, 59.8% of Test Group respondents in the Toothpaste Survey indicated they believed that the Tom's toothpaste product contains only natural ingredients (i.e., no artificial ingredients). After accounting for guessing and other forms of survey noise, the net level of deception is 26.3%. It is my understanding that this result is above the threshold courts have found to support a finding of deception.³²
82. Additionally, 62.5% of Test Group respondents in the Deodorant Survey indicated they believed that the Tom's deodorant product contains only natural ingredients (i.e., no artificial ingredients). After accounting for guessing and other forms of survey noise, the net level of deception is 24.0%. It is my understanding that this result is above the threshold courts have found to support a finding of deception.³³

I declare under penalty of perjury of the laws of the United States that the foregoing is true and correct. Executed on July 21, 2022, in Acton, Massachusetts.



Brian M. Sowers

³² McCarthy on Trademarks and Unfair Competition § 32:193 (5th ed.). “Since the issue of likely customer deception from an allegedly false advertisement is closely analogous to the issue of likely confusion from an allegedly infringing mark, it is proper to use the percentage figures accepted in likelihood of confusion surveys.”; McCarthy on Trademarks and Unfair Competition § 32:188 (5th ed.). “the Second Circuit found that a 15-20% rate corroborates a finding of likely confusion.”

³³ Id.